How to change spark plugs on **BMW 3 Coupe (E46)** – replacement guide

SIMILAR VIDEO TUTORIAL



This video shows the replacement procedure of a similar car part on another vehicle

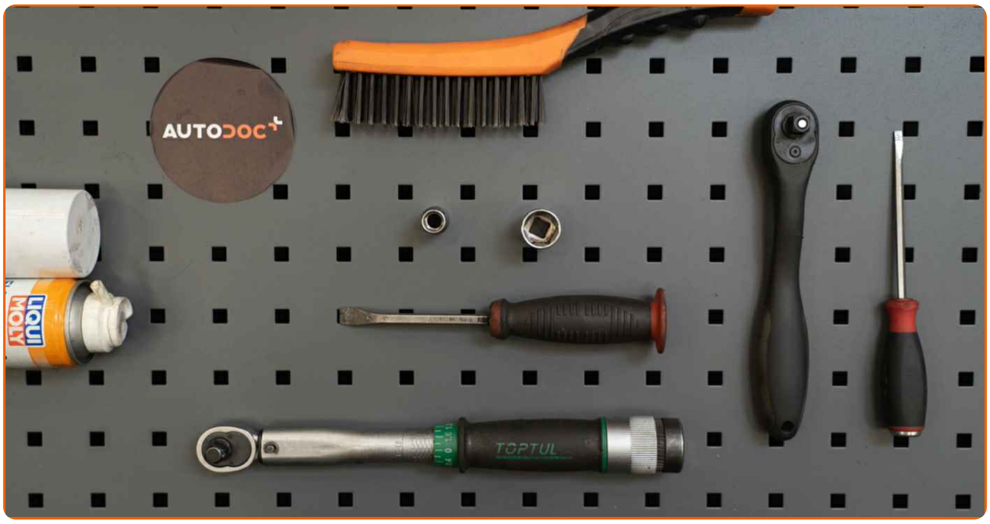
Important!

This replacement procedure can be used for:
BMW 3 Coupe (E46) 323Ci 2.5, BMW 3 Coupe (E46) 328Ci 2.8, BMW 3 Coupe (E46) 320Ci 2.0, BMW 3 Coupe (E46) 318Ci 1.9, BMW 3 Coupe (E46) 330xi 3.0, BMW 3 Coupe (E46) 320Ci 2.2, BMW 3 Coupe (E46) 325Ci 2.5, BMW 3 Coupe (E46) 316Ci 1.6, BMW 3 Coupe (E46) 318Ci 2.0, BMW 3 Coupe (E46) 330Ci 3.0

The steps may slightly vary depending on the car design.

This tutorial was created based on the replacement procedure for a similar car part on: BMW 3 Saloon (E36) 323i 2.5

REPLACEMENT: SPARK PLUGS – BMW 3 COUPE (E46). TOOLS YOU MIGHT NEED:



- Electronic spray
- High-temperature anti-seize lubricant
- Torque wrench
- Drive socket # 10
- Spark plug socket # 16
- Ratchet wrench
- Flat screwdriver
- Crow bar
- Fender cover

Buy tools

Replacement: spark plugs – BMW 3 Coupe (E46). AUTODOC experts recommend:

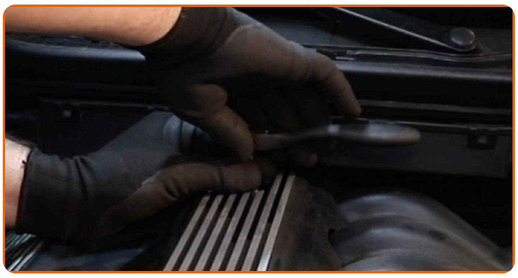
- The replacement procedure is the same for all spark plugs.
- Please note: all work on the car – BMW 3 Coupe (E46) – should be done with the engine switched off.

CARRY OUT REPLACEMENT IN THE FOLLOWING ORDER:

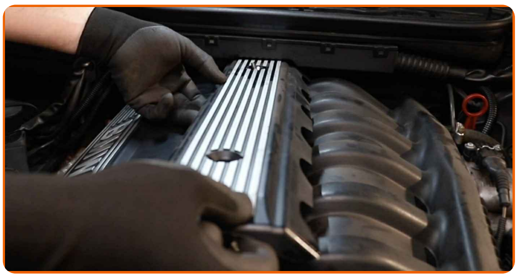
1. Open the hood.

2. Use a fender protection cover to prevent damaging paintwork and plastic parts of the car.

3. Unscrew the engine cover fastener. Use a drive socket #10. Use a ratchet wrench.



4. Remove the engine cover.



AUTODOC recommends:

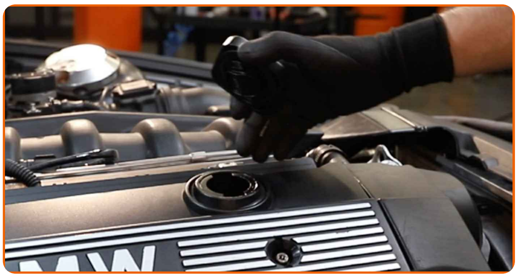
- Replacement: spark plugs – BMW 3 Coupe (E46). To avoid damaging the part when removing it, do not use excessive force.

5 Unscrew the engine cover fastener. Use a drive socket #10. Use a ratchet wrench. Use a flat screwdriver.



6 Unscrew the oil filler plug.

7 Remove the oil filler cap.



8 Remove the engine cover.



AUTODOC recommends:

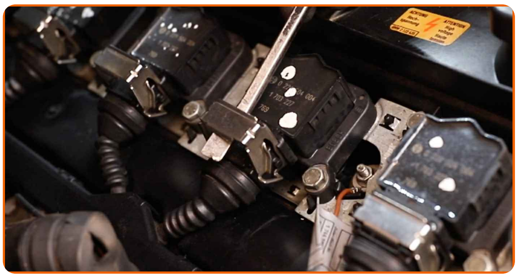
- Replacement: spark plugs – BMW 3 Coupe (E46). Do not use excessive force when removing the part as this may damage it.

9 Install the oil filler cap.

10 Tighten the oil filler cap.



11 Unplug the connectors from the ignition coils. Use a crowbar.



12 Unscrew the fasteners of the ignition coils. Use a drive socket #10. Use a ratchet wrench.



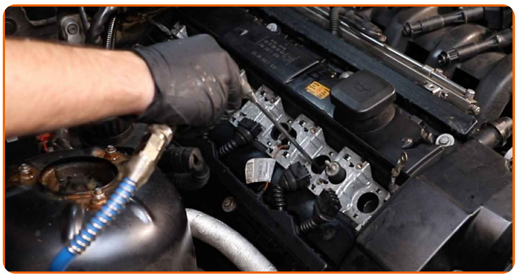
13 Take out the ignition coils from the spark plug wells.



Replacement: spark plugs – BMW 3 Coupe (E46). Tip from AUTODOC experts:

- Remember the sequence of steps for ignition coil demounting.

14 Clean dirt, dust and debris from inside the spark plug wells.



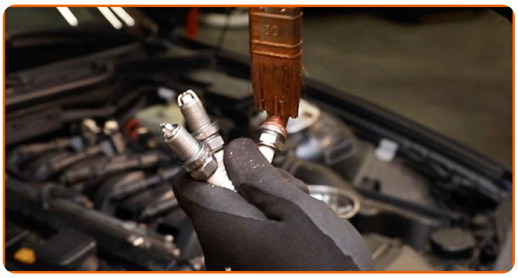
15 Unscrew the spark plugs. Use the spark plug socket #16. Use a ratchet wrench.



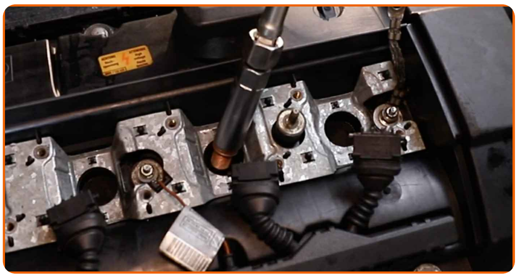
16 Take out the spark plugs.



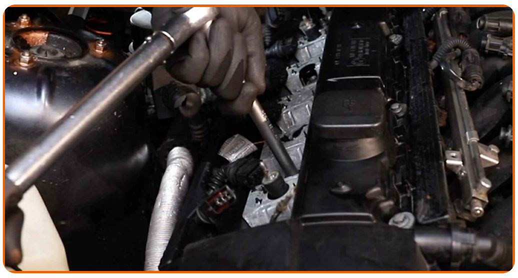
17 Apply a thin layer of a special high temperature anti-seize lubricant to the threads of the new spark plugs.



18 Install the new spark plugs into their mounting seats. Use the spark plug socket #16.



19 Screw new spark plugs and tighten them. Use the spark plug socket #16. Use a torque wrench. Tighten it to 24 nm torque.



Replacement: spark plugs – BMW 3 Coupe (E46). AUTODOC recommends:

- Don't tighten the plugs with excessive force. Exceeding tightening torque can damage the thread connection.
- Be careful when working with a spark plug wrench. Its skewing can cause damage to the threaded connection.

20 Install the ignition coils to the spark plug wells. Make sure you hear a click indicating that it is locked in place.



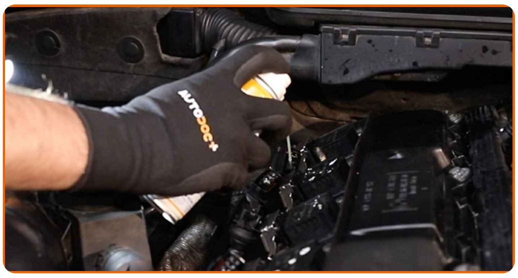
Replacement: spark plugs – BMW 3 Coupe (E46). AUTODOC experts recommend:

- Follow the installation sequence.

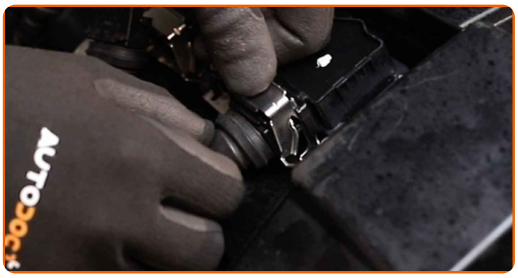
21 Tighten the ignition coil fasteners. Use a drive socket #10. Use a torque wrench. Tighten it to 7 nm torque.



22 Treat the ignition coil connector with electronic spray.



23 Plug in the connectors of the ignition coils.



24 Unscrew the oil filler plug.



25 Remove the oil filler cap.

26 Install the engine cover and secure it.

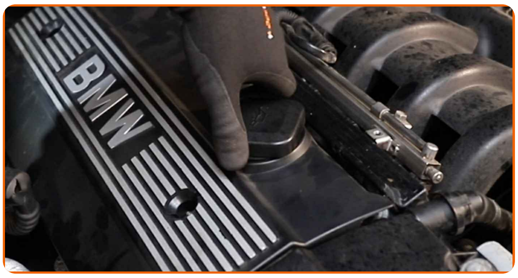


AUTODOC recommends:

- Make sure the engine cover is properly seated. It should not be displaced with respect to the guiding fasteners.
- Replacement: spark plugs – BMW 3 Coupe (E46). To avoid damaging the part during installation, do not use excessive force.

27 Install the oil filler cap.

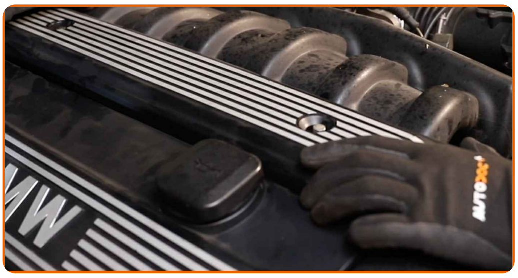
28 Tighten the oil filler cap.



29 Screw in the engine cover fasteners. Use a drive socket #10. Use a ratchet wrench.



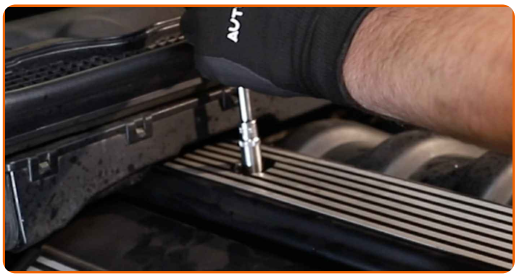
30 Install the engine cover and secure it.



Replacement: spark plugs – BMW 3 Coupe (E46). AUTODOC experts recommend:

- Make sure the engine cover is properly seated. It should not be displaced with respect to the guiding fasteners.
- When installing, do not use excessive force to avoid damage to the part.

31 Screw in the engine cover fasteners. Use a drive socket #10. Use a ratchet wrench.



32 Run the engine for a few minutes. This is necessary in order to make sure that the component operates properly.

33 Shut off the engine.

34 Remove the fender protection cover.

35 Close the hood.

WELL DONE!

VIEW MORE TUTORIALS

AUTODOC — TOP QUALITY AND AFFORDABLE CAR PARTS ONLINE

ⓘ DISCLAIMER:

The document contains only general recommendations that may be useful for you when you perform repair or replacement work. AUTODOC shall not be liable for any loss, injury, damage of property occurring in the repair or replacement process due to incorrect use or misinterpretation of the provided information.

AUTODOC shall not be liable for any possible mistakes and uncertainties in this guide. The information provided is for information purposes only and cannot replace advice from specialists.

AUTODOC shall not be liable for incorrect or hazardous usage of equipment, tools and car parts. AUTODOC strongly recommends to be careful and observe the safety rules when performing repair or replacement works. Remember: usage of low quality auto parts does not guarantee you the appropriate level of road safety.